

Remarks

1. Status of the Application

Claims 1, 2, 4-8, 10-14, 17, 18, 20-36, 47-53, 69-87 and 89-113 are pending. Of these claims, claims 4-7, 17, 20, 24-27, 51, 53, 75, 85, 86, 93 and 95 are withdrawn from consideration. Claims 1, 2, 8, 10-14, 18, 21-23, 28-36, 47-50, 69-74, 76-84, 87, 89, 91, 92, 94 and 96-113 stand rejected. Please note that the Office action appears to incorrectly include withdrawn claims 85 and 86 in the listing of currently rejected claims.

Claim 90 was objected to as dependent upon a rejected base claim, but the Office action states that it would allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. Summary of Telephonic Interview

A telephone interview was conducted on March 17, 2004 between Examiner Frank, inventor Dr. Robert O'Brien and attorneys for applicant. The interview focused on the feature of independent claim 1 of "increasing pressure applied to the sample to compress the sample to a smaller volume and provide a pneumatically focused gas sample." Dr. O'Brien explained the gas analysis method of claim 1 and how it is superior to and can be used as an alternative to the methods of sorbent-trapping and cryogenic-focusing exemplified by the Rounbehler patent (U.S. Patent No. 5,099,743). Furthermore, Dr. O'Brien explained that in contrast to these prior methods that selectively remove certain components of a gaseous mixture before analysis, the method of claim 1 concentrates all components of a gas sample for analysis, save water which often will condense out of air upon pressurization. Dr. O'Brien added that condensation of water from a gas sample, if it occurs, is advantageous because of adverse effects associated with injecting water onto a chromatographic column.

It was further discussed that in contrast to the method of claim 1, which includes the feature of increasing pressure, the Rounbehler patent does not teach or suggest increasing the pressure of a gas sample to provide a pneumatically focused gas sample. Rather, the Rounbehler patent, at column 5, lines 34-38, and column 21, lines 36-46, teaches decreases in pressure for sample collection ("pressure drop") and desorption of a collected sample ("by use of vacuum"), respectively.

The interview concluded with Examiner Frank stating that he would prepare an interview summary record, and that applicant should submit a written response summarizing the arguments made in support of the patentability of the claims.

3. Rejections under 35 U.S.C. §112, second paragraph

Claims 35 and 36 were rejected for allegedly being indefinite. Claims 35 and 36 have been amended to clearly recite a method of claim 1 that is automated, and a method of claim 1 under the control of a computer, respectively. Claims 35 and 36 as amended are not indefinite and applicant requests that the indefiniteness rejections be withdrawn. The amendments do not change the scope of either claim 35 or claim 36.

4. Rejections under 35 U.S.C. §103

Claims 1, 2, 8, 10-14, 18, 21-23, 28-36, 47-50, 69-74, 76-84, 87, 89, 91, 92, 94 and 96-113 stand rejected for allegedly being obvious in view of U.S. Patent No. 5,099,743 to Rounbehler et al. ("the Rounbehler patent"). Applicant traverses these rejections.

Claim 1 is not obvious in view of the Rounbehler patent for at least the reason that the Rounbehler patent does not teach or suggest the feature of "increasing pressure applied to the sample to compress the sample to a smaller volume and provide a pneumatically focused gas

sample.” Since this feature of claim 1 is not taught or suggested by the Rounbehler patent, claim 1 is not obvious in view of the Rounbehler patent and should be allowed.

Furthermore, it appears that the Rounbehler patent teaches away from using an increase in pressure of a gas sample. At column 5, lines 34-38, the Rounbehler patent teaches that with regard to the disclosed sample collector that mass transfer theory “permits appropriate selection of tube diameter, tube length, and flow rates for high collection efficiency at manageably low pressure drop.” (emphasis added) At column 21, lines 36-44, the Rounbehler patent teaches that “[a] gas sample which has been collected from the air is processed ... by being desorbed from a collector,” and that “the desorbtion may be performed at or below atmospheric pressure by use of vacuum, which reduces the time and amount of carrier gas (e.g. hydrogen) required.” (emphasis added)

Likewise, independent claim 105 includes the feature of “compressing a gas sample comprising VOCs to a smaller volume in a sample collection tube by increasing pressure applied to the sample using a carrier-pneumatic focusing gas to provide a pneumatically focused sample.” Since the Rounbehler patent does not teach or suggest increasing the pressure on a sample, claim 105 is not obvious in view of the Rounbehler patent for at least the reasons that are provided above for claim 1.

Since independent claims 1 and 105 are not obvious in view of the Rounbehler patent, dependent claims 2, 8, 10-14, 18, 21-23, 28-36, 47-50, 69-74, 76-84, 87, 89, 91, 92, 94 and 96-113, which depend from claim 1 or from claim 105, also are not obvious in view of the Rounbehler patent and should be allowed. Furthermore, each of the dependent claims recites a unique combination of features that defines a distinct invention not shown or suggested by the prior art. Thus each dependent claim should be considered separately and allowed.

5. *Objection to Claim 90*

Claim 90 was objected to for depending from a rejected base claim. The base claim in this instance is claim 1. Because claim 1 is allowable for the reasons presented above, the objection to claim 90 should be withdrawn, and the claim allowed.

6. *Conclusion*

Applicant submits that the application is now in condition for allowance and requests that a Notice of Allowance be issued. If any issues remain, the Examiner is invited to telephone the undersigned at the phone number listed below.

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Respectfully submitted,

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